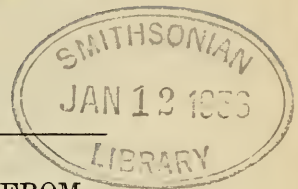


PROCEEDINGS  
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A NEW REED VOLE, GENUS *MICROTUS*, FROM  
CENTRAL KOREA

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The study of a collection of mammals from Korea has revealed the existence in the central part of that peninsula of an undescribed vole of the species *Microtus fortis*. This study is being carried out at the United States National Museum in cooperation with the Commission on Hemorrhagic Fever of the Armed Forces Epidemiological Board and the Army Medical Service Graduate School.

All measurements are in millimeters. Capitalized color terms are from Ridgway (Color standards and color nomenclature, Washington, D. C., 1912).

***Microtus fortis uliginosus*, new subspecies**

*Type*.—Adult female in summer pelage, skin and skull, United States National Museum no. 298078, from Chip'o-ri (38° 08' N, 127° 19' E), Korea; obtained 28 August 1952 by William H. Lawrence, original no. B-12098.

*Distribution*.—Known only from a restricted area in central Korea bounded by Kumhwa and Ch'orwon on the north and the 38th Parallel of latitude on the south.

*Diagnosis*.—Size large; upper parts glossy, Olive Brown; skull large and massive; auditory bullae and cheekteeth large.

*Description*.—Size large for species (see measurements). Color: Upper parts (summer pelage) glossy and averaging overall near Olive Brown (individual hairs entirely blackish or banded subterminally with near Ochraceous-Buff); sides more suffused with ochraceous than back; underparts grayish-white, usually faintly tinged with buff; ears dark brownish; feet brownish above, paler on inner sides (over metatarsals of first and second digits) and below; tail distinctly bicolor, blackish-brown above, grayish-white below. Skull: Large and massive (see measurements); nasals expanded anteriorly; infraorbital canals narrow when viewed from the front; zygomatic arches distinctly bowed, though rather straight in jugal region, and relatively massive; skull deepest over anterior parts of orbits; auditory bullae and cheekteeth large.

*Measurements*.—External measurements of the type specimen, followed by average and extreme external measurements of four other adult females from the type locality, are, respectively: Total length,

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211, 206.0 (197-215); length of tail vertebrae, 62, 57.7 (55-61); length of hind foot, 24, 24.2 (21-27); length of ear from notch, 15, 15.5 (14-17). Average and extreme external measurements of five adult males from the type locality are as follows: Total length, 207.8 (193-223); length of tail vertebrae, 64.2 (57-70); length of hind foot, 24.4 (23-26); length of ear from notch, 16.4 (15-18). For cranial measurements see Table 1.

*Comparisons.*—From *Microtus fortis pelliceus* of Manchuria and southeastern Siberia (specimens from Sungari River, 60 miles southwest of Kirin, Manchuria, and the type specimen which was examined by Johnson at the British Museum but is not at hand as we write), *M. f. uliginosus* differs in: Upper parts, in general, more suffused with ochraceous and having a slightly lighter and somewhat more olivaceous appearance; winter pelage shorter and seemingly less dense; underparts slightly lighter, usually faintly tinged with buff; upper surfaces of hind feet paler on inner margins rather than wholly dark; tail averaging paler below; skull larger in most dimensions (see Table 1) and more massive; nasals more expanded anteriorly; infraorbital canals narrower when viewed from the front; auditory bullae and cheekteeth larger. From *Microtus fortis calamorum* of northeastern China (specimens from Yochow, Hunan), *M. f. uliginosus* differs in: Upper parts distinctly darker (less buffy) and more glossy in appearance; tail darker above; underparts more buffy; skull conspicuously larger and more massive.

*Remarks.*—*Microtus fortis uliginosus* most closely resembles *M. f. pelliceus* among named subspecies. Externally it differs from *pelliceus* only slightly in color and size, but it averages larger than that subspecies in a number of cranial dimensions. At present the new subspecies is known only from a restricted area in central Korea just north of the 38th Parallel of latitude. It occurs there in lowland habitats, principally along stream banks and in abandoned paddy fields.

Kuroda (Jour. Mamm., 15:231, 1934) reported *M. f. pelliceus* from Bampo and near Yuki in extreme northeastern Korea. The records herein enumerated for the new subspecies extend the known range of the species southward on the Korean peninsula nearly 400 miles. For additional cranial measurements of *M. f. pelliceus*, see Tokuda (Bull. Biogeog. Soc. Japan, 4:139-140, 1941).

*Specimens examined.*—Seventy-five, all from Korea, as follows: Chip'o-ri, 43 (USNM 294651-59, 294661-63, 298070-72, 298078-89, 298958, 299509-15, 300647, 301252-53, 301256; Mus. Nat. Hist., Univ. Kansas, 60442, 63839-41; Mus. Zool., Univ. Michigan, 99592); 1½ mi. NW Chip'o-ri, 140 meters, 1 (Mus. Nat. Hist., Univ. Kansas, 60437); 2 mi. N Chip'o-ri, 150 meters, 1 (USNM 298959); 3 mi. NW Chip'o-ri, 145 meters, 6 (USNM 298961-63, 299096-97; Mus. Nat. Hist., Univ. Kansas, 60443); Ch'ongyang-ni, 8 (USNM 294660, 294664, 298090-93, 298099-100); Ch'onsong-ni, 1 (USNM 298094); Kumhwa, 6 (USNM 294665-66, 298096-98; Nat. Sci. Mus. Japan, 1 specimen); Taegwang-ni, 90 meters, 2 (USNM 301255; Mus. Nat. Hist., Univ. Kansas 60440); Ugu-dong, 3 (USNM 298957, 298960, 301254); White Horse Mt., near Ch'orwon, 1 (Mus. Comp. Zool., Harvard, 47136); Yoneb'on, 1 (USNM 301257); Yongp'yong, 110 meters, 1 (Mus. Nat. Hist., Univ. Kansas, 60441).

TABLE 1. Cranial measurements of two subspecies of *Microtus fortis*.

	Condylobasal length	Oecipitonasal length	Palatal length	Zygomatic breadth	Breadth across auditory bullae	Interorbital breadth	Length of nasals	Length of incisive foramina	Alveolar length of upper molar-form toothrow
<i>Microtus fortis pelliceus</i> , Ussuri River, southeastern Siberia.									
BM 91.6.29.2, ♂ (type)	-----	29.6	18.6	-----	-----	4.2	9.1	5.7	---
<i>Microtus fortis pelliceus</i> , Sungari River, 60 mi. SW Kirin, Manchuria.									
USNM 197863, ♂	32.2	30.9	19.1	17.9	14.8	4.2	8.7	6.0	7.8
USNM 197860, ♀	31.9	31.3	18.9	17.6	14.5	4.1	8.7	6.4	8.3
<i>Microtus fortis uliginosus</i> , Chip'o-ri, Korea.									
USNM 298078, ♀ (type)	33.2	32.5	19.3	18.3	15.0	4.4	8.9	6.0	7.9
Average 4 ♀	33.4	32.6	19.7	18.8	14.9*	4.4	9.2	6.0	8.4
Minimum	32.8	32.4	19.2	18.4	14.5	4.4	8.7	5.7	7.9
Maximum	34.0	33.2	20.2	19.7	15.6	4.5	9.5	6.3	9.0
Average 5 ♂	34.4	33.1	19.9	18.7	15.1	4.5	9.1	6.3	8.4
Minimum	33.9	32.2	19.5	18.4	14.6	4.3	8.5	5.9	8.1
Maximum	35.0	33.6	20.2	19.2	15.4	4.7	9.6	6.5	8.7

\*Three specimens